## REMARKS

Applicant submits the following remarks in response to the Office Action of April 23, 2003. The Office Action acknowledged Applicant's election of Group I, claims 1-10. The Office Action objected to the drawings for failing to show every feature of the invention specified in the claims and objected to the specification for failing to provide proper antecedent basis in the terminology of the specification.

The Office Action rejected claim 7 for indefiniteness under 35 U.S.C. § 112, second paragraph, claims 1-3, 5, 6 and 9 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,072,233 to Kramer et al. ("Kramer"), claims 9 and 10 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,762,514 to Yoshida ("Yoshida"), claims 1, 2 and 5-10 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,116,782 to Arkins et al. ("Arkins"), and claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Kramer or Arkins.

In this amendment, Applicant cancels claims 1-10 without prejudice, adds new claims 18-27, and explains why the new claims are patentable over the cited art. Applicant respectfully submits that new claims 18-27 are supported by the specification and figures as filed and are patentable over the prior art of record. Accordingly, Applicant requests a notice of allowance.

### a. Objection to Drawings

The Office Action objected to the drawings under 37 C.F.R. § 1.83(a) for failing to show the second continuous arcuate channel recited in claim 8. Applicant has canceled claim 8 and respectfully requests that this objection be reconsidered and withdrawn.

### b. Objection to Specification

The Office Action objected to the specification under 37 C.F.R. § 1.75(d)(1) for allegedly failing to provide antecedent basis in the specification for the claim terminology "arcuate channel," which was recited in claims 1 and 8. Applicant has canceled claims 1 and 8. However, Applicant's new claims 18 and 23 recite that the "channel's route is arcuate." Applicant respectfully directs the Examiner to page 3, lines 5-7, where the specification states

that the "frangible piercing area is defined by a continuous arcuate channel created through at least one layer of the multi-layer panel." Also, the rest of the specification and Figures 1, 3 and 5-10 make it clear that at least a portion of each channel's route along the exterior polymer layer is arcuate. Therefore, Applicant respectfully requests that the objection be reconsidered and withdrawn.

**c. 35 U.S.C. § 112 Rejection**

The Office Action rejected claim 7 as being indefinite for failing to provide antecedent basis for terms in the claim. Applicant has cancel claim 7 and respectfully requests that the rejection be reconsidered and withdrawn.

**d. 35 U.S.C. § 102(b) Rejections**

The Office Action rejected claims 1-3, 5, 6 and 9 under 35 U.S.C. § 102(b) as being anticipated Kramer, claims 9 and 10 under 35 U.S.C. § 102(b) as being anticipated by Yoshida, and claims 1, 2 and 5-10 under 35 U.S.C. § 102(b) as being anticipated by Arkins. Applicant cancels claims 1-10 without prejudice and respectfully requests that the rejection be reconsidered and withdrawn.

**e. 35 U.S.C. § 103(a) Rejections**

The Office Action rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Kramer or Arkins. Applicant cancels claim 4 without prejudice and respectfully requests that the rejection be reconsidered and withdrawn.

**f. New Claims**

Applicant adds new claims 18-27. These claims add no new matter and are supported by the specification and figures as filed. Specifically, the new claims are supported by: FIG. 1-6; lines 6, 11-12, and 23-24 of page 3; and lines 8 and 14-21 of page 7.

A claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference. *MPEP § 2131.* Independent claim 18 is directed to a pouch comprising a frangible piercing point including: (1) at least one, but no more than one

continuous channel through the exterior polymer layer, wherein the channel is formed by exposure to laser energy and a substantial portion of the channel's route is arcuate; (2) at least one, but no more than one substantially enclosed area defined by the continuous channel and retaining the exterior polymer layer; and (3) a hinge adjacent to the substantially enclosed area and retaining the exterior polymer layer, wherein the exterior polymer layer extends in a continuous layer from the substantially enclosed area, through the hinge, and to the rest of the external surface.

Independent claim 23 is directed to a method of forming a pouch and recites limitations that are substantially similar to those recited in independent claim 18. Thus, the arguments pertaining to independent claim 18 should also apply to independent claim 23.

*1. Comparison of New Claims to Kramer*

Kramer discloses a "piercing point [] defined by a stamped ... depression which extends from the outside toward the inside of the wall of the bag, but which does not completely pierce the wall." *Kramer specification, col. 2, ll. 3-7.* Kramer's piercing point "is made by cutting ... part way through the wall of the bag." *Kramer specification, col. 2, ll. 57-59.* Kramer's disclosed depressions 2 (i.e., channels), by which the pouch wall separates to form a penetration to accommodate a straw, are either: (1) non-arcuate (see Kramer Figs. 2 and 3); or (2) arcuate without a hinge and without an exterior polymer layer that extends continuously from the area defined by the channel (i.e., a substantially enclosed area), through the hinge and to the rest of the external surface (see Kramer Fig. 1).

Unlike independent claims 18 and 23, Kramer fails to disclose: (1) a "channel [] formed by exposure to laser energy [,wherein] a substantial portion of the channel's route is arcuate;" (2) "a hinge ... retaining the exterior polymer layer;" or (3) "the exterior polymer layer extend[ing] in a continuous layer from the substantially enclosed area, through the hinge, and to the rest of the external surface." For at least these reasons, Kramer does not anticipate independent claims 18 and 23. Since claims 19-22 depend on claim 18 and claims 24-27 depend on claim 23, the above reasoning applies *a fortiori* to dependent claims 19-22 and 24-27.

Kramer's non-arcuate penetrations are disadvantageous because they are less likely to form tightly and uniformly around a penetrating straw that has an arcuate cross-section. This makes it more likely that Kramer's non-arcuate penetration will leak as compared to an arcuate penetration. Applicant's invention, as claimed in new independent claims 18 and 23, overcomes this disadvantage of Kramer.

Kramer's lack of a hinge with an intact exterior polymer layer makes it more likely that Kramer's substantially enclosed area, which is defined by Kramer's depressions 2 or cuts, will break completely free of the pouch wall. Once free, the substantially enclosed area can be sucked up by the person consuming the contents of the pouch. Applicant's invention, as claimed in new independent claims 18 and 23, overcomes this disadvantage of Kramer.

*2. Comparison of New Claims to Yoshida*

Yoshida discloses a method of making a beverage packaging bag by using a laser to cause "a plurality of cuts [] in the outer layer to facilitate piercing of a straw through the panel." *Yoshida abstract.* Yoshida's cuts 11 (i.e., channels), by which the pouch wall separates to form a penetration to accommodate a straw, are multiple, linear, non-arcurate, and either cross each other to form more than one substantially enclosed area with a hinge (see FIGS. 1 & 4) or do not cross each other and do not form a substantially enclosed area defined by no more than one cut (see FIGS. 6 & 8). *Yoshida specification, col. 3, l. 32; col. 4, l. 2.*

Unlike independent claims 18 and 23, Yoshida fails to disclose: (1) "at least one, but no more than one continuous channel through the exterior polymer layer, wherein ... a substantial portion of the channel's route is arcuate;" and (2) "at least one, but no more than one substantially enclosed area defined by the continuous channel." For at least these reasons, Yoshida does not anticipate independent claims 18 and 23. Since claims 19-22 depend on claim 18 and claims 24-27 depend on claim 23, the above reasoning applies *a fortiori* to dependent claims 19-22 and 24-27.

Yoshida's multiple, linear, non-arcuate cuts 11 are disadvantageous because they can result in a non-arcuate penetration, which is less likely to form tightly and uniformly around a penetrating straw that has an arcuate cross-section. This makes it more likely that Yoshida's

non-arcuate penetration will leak as compared to an arcuate penetration. Applicant's invention, as claimed in new independent claims 18 and 23, overcomes this disadvantage of Yoshida.

*3. Comparison of New Claims to Arkins*

Arkins discloses a straw piercing area 2 that has had its polyester film 3 (i.e., exterior polymer layer) removed by a laser. *Arkins specification, col. 1, ll. 55-63; col. 4, ll. 3-8; FIGS. 1-4.* Within the straw piercing area 2, the polyethylene film 8 (i.e., internal polymer layer) has multiple smaller areas of laser caused delamination 9, 23 (see FIGS. 2-4). *Arkins specification, col. 3, ll. 12-41.*

Unlike independent claims 18 and 23, Arkins fails to disclose a frangible piercing point ... including: (1) "at least one, but no more than one continuous channel through the exterior polymer layer," (2) "at least one, but no more than one substantially enclosed area defined by the continuous channel and retaining the exterior polymer layer," and (3) "a hinge adjacent to the substantially enclosed area and retaining the exterior polymer layer, wherein the exterior polymer layer extends in a continuous layer from the substantially enclosed area, through the hinge, and to the rest of the external surface." For at least these reasons, Arkins does not anticipate independent claims 18 and 23. Since claims 19-22 depend on claim 18 and claims 24-27 depend on claim 23, the above reasoning applies *a fortiori* to dependent claims 19-22 and 24-27.

Arkins's lack of a piercing area with an exterior polymer layer and its lack of a hinge with an exterior polymer layer makes it more likely that Arkins's delaminated piercing area 2 will break completely free of the pouch wall. Once free, the piercing area 2 can be sucked up by the person consuming the contents of the pouch. Applicant's invention, as claimed in new independent claims 18 and 23, overcomes this disadvantage of Arkins.

## CONCLUSION

In view of the preceding remarks, Applicant respectfully urges that the objections and rejections be reconsidered and withdrawn and that new claims 18-27 be allowed. However, if the Examiner believes that any issues remain unresolved, the Examiner is invited to telephone the undersigned to expedite allowance.

Respectfully submitted,

DORSEY & WHITNEY LLP
**Customer Number 25763**

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By: S. Wade

S. Wade Johnson
Reg. No. 50,873
Intellectual Property Department
Suite 1500, 50 South Sixth Street
Minneapolis, MN 55402-1498
(612) 340-8835